European Charter for Access to Research Infrastructures

- DRAFT –

PREAMBLE

Research Infrastructures are at the heart of the **knowledge triangle of research, education and innovation** and therefore play a vital role in the advancement of knowledge and technology and their exploitation. By offering high quality services to Users from different countries, including new ones, by attracting young people to science and by networking, Research Infrastructures help structuring the scientific community and play a key role in the construction of an efficient research and innovation environment. Support to the effective and efficient construction and operation of Research Infrastructures is a key priority in realising the European Research Area. Because of their ability to assemble a critical mass of people, knowledge and investment, Research Infrastructures contribute to **regional, national, European and global development** and are one of the most efficient tools to promote international cooperation.

Research Infrastructures are also crucial in helping Europe leading a global movement towards open, interconnected, data-driven and computer-intensive science research, experimental development, as well as education and training. They increase the creativity in and efficiency of research and bridge the divide between developed and lesser-developed regions. To a greater and greater degree, Research Infrastructures comprise elements of **digital services** making the infrastructures and their services accessible and enabling collaboration among Users over geographical and topical boundaries. From a User´s perspective, this development often leads to a situation in which the physical location of the Research Infrastructure becomes less relevant. This nature of Research Infrastructures and data involved poses a number of challenges in relation to the data's ownership and to the necessity of providing transparency and Access to it. The exponential growth of data moreover poses challenges to its effective handling.

Just as public infrastructures form the substrate of civil society, Research Infrastructures are the backbone of scientific communities. Research Infrastructures have been well established in the physical sciences and the humanities for a long time. More recently, **accessible infrastructures** have spread into all disciplines of science, including life, environmental and social sciences. This spread has happened not least under the influence of increasingly important interdisciplinary User communities, digital science and of the move towards open access to scientific publications and data.

Strong investment in research and innovation is needed to address pressing **societal challenges** such as climate change, health, an ageing population, or the move towards a resource efficient society. Research Infrastructures play a vital role in addressing these challenges. However, it is essential to optimise the use of resources for increasingly expensive facilities, to overcome the fragmented Research Infrastructure spending not only across Europe, but at a more global scale, and to join forces to address these challenges. As such, the scale and scope of scientific investigation and the challenges driving the development of large Research Infrastructures deserve particular attention. In

addition, where Access to Research Infrastructures is granted among research organisations, this should not be burdened by unnecessary taxation.

Promoting the **cooperation with industrial Users** and allowing them Access to Research Infrastructures can be enabled through quality-based, market-based and ubiquitous Access modes. Bridging the public, commercial and Research Infrastructure worlds by dedicated initiatives will help to close the gap between scientific excellence and knowledge and technology transfer to industry and public services as drivers for innovation. In addition, industrial Users also play an increasing role in the construction of Research Infrastructures.

1. PURPOSE

    This Charter sets out **non-regulatory principles and guidelines** to be used as reference when defining rules and conditions for Access to Research Infrastructures.

    While not having any legally binding nature, Research Infrastructures are thus encouraged to use this Charter as reference when updating existing or defining new rules and conditions for Access. In addition, the funding organisations of Research Infrastructures are also invited to promote this Charter's provisions.

    This Charter also promotes **Access to research** in the sense of setting the basis for Users to obtain Access to Research Infrastructures and research related services in order to conduct innovative research and take part in collaborative research efforts.

    All Users should, on the basis of their high quality work and ideas, be granted Access to the most advanced instruments, methods and services for effective research and development activities as well as for education and training.

    This Charter moreover promotes interaction with a wide range of social and economic activities, including, as appropriate, **industry and public services**, in order to maximise the return on investment in Research Infrastructures and to maximise innovation, competitiveness and efficiency in terms of use of the scarce resources available.

    In the context of the implementation of the European Research Area, this Charter shall contribute towards the development of common and harmonised standards for Access policies, rules and conditions to Research Infrastructures.

2. APPLICABILITY

    This Charter applies to any Research Infrastructure as defined below and should be taken into account when defining Access rules and conditions, providing Access, conducting research, undertaking experimental development, providing education and training and/or delivering services.

    This Charter is primarily targeted at those responsible for the definition of Access rules and conditions to any given Research Infrastructure and, therefore, at the Research Infrastructures themselves, at the institutions to which they belong and at their respective research funding organisations.

    While expressing the European approach for Access to Research Infrastructures, this Charter is offered as a **reference document worldwide**.

3. DEFINITIONS

    a. Research Infrastructures

    'Research Infrastructures' are facilities, resources and services that are used by the research communities to conduct research and foster innovation in their fields. They include: major scientific equipment (or sets of instruments), knowledge-based resources such as collections, archives or scientific data, e-infrastructures, such as data and computing systems and communication networks and any other

infrastructure of a unique nature essential to achieve excellence in research and innovation[1].

b. Users

'Users' of Research Infrastructures are researchers and all others engaged in the conception or creation of new knowledge, products, processes, methods and systems and also in the management of their projects, including those from business and industry. Users can also consist of teams that include technical staff and/or students participating in the research in the framework of their studies[2].

c. Access

i. 'Access' refers to the legitimate and authorised physical, remote and/or virtual Access to Research Infrastructures and/or to services offered by Research Infrastructures to Users.

ii. Services provided by Research Infrastructures may include, amongst other, machine time, computing resources, software, data, communication, sample preparation, access to archives or collections, education and training, expert support and analytical services.

4. PRINCIPLES

a. Access modes

Acknowledging the different purposes of Access and in function of possible contractual and legal obligations, Access to any Research Infrastructure may be regulated according to one specific Access mode as defined under the Guidelines section of this Charter, but also as a combination of some or all of them.

b. Legal conformity

National and international law and agreements, particularly, but not only, in areas such as intellectual property rights and the protection of privacy, ethical considerations as well as safety, security and public order regulations must be taken into account when designing rules and conditions for Access to and use of Research Infrastructures.

c. Costs and fees

Acknowledging a variety of possible financing models, costs need to be covered and fees for Access, as found necessary, should contribute to the financial sustainability of the Research Infrastructure.

d. Ethical conduct

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[1] Horizon 2020 Work Programme 2014-2015 in the area of "European research infrastructures (including e-Infrastructures) December 2013.

[2] Based on OECD Frascati Manual definitions (2002)

Research Infrastructures and Users should ensure that the research conducted as well as the use of research data and findings adhere to the standard codes of conduct and ethical behaviour in scientific research.

e. Non discrimination

Research Infrastructures shall not discriminate on any personal grounds in granting Access to Users.

f. Implementation

The administration connected to requesting and granting Access to Research Infrastructure should be kept to a minimum.

g. Research data management

Users and Research Infrastructures should have a basic level of research data management.

h. User instruction

Research Infrastructures should provide the Users with instructions for the effective use of the Research Infrastructure.

5. GUIDELINES

a. Access modes

i. Quality-based Access

1) The quality-based Access mode is exclusively dependent on the scientific excellence, originality, quality and feasibility of an application.

2) It enables Users to get access to the best facilities, resources and services wherever located. This Access mode enables collaborative efforts, across geographical and disciplinary boundaries.

3) Research Infrastructures should define and make public the procedures for application, evaluation, selection and admission. Users requesting Access must submit an application which describes in detail the intended use of the Research Infrastructure and/or required services. The applications should be evaluated through peer review conducted by experts. Research Infrastructures should communicate and motivate their decision on the request for Access to the Users.

ii. Quota-based Access

When stipulated in the legal or operational framework of a Research Infrastructure, Access may be allocated based on quotas determined by the Research Infrastructure (e.g. based on financial contributions from its partners or on research programmes agreed upon with predefined Users).

iii. Market-based Access

1) The market-based Access mode applies when Access is defined through a negotiation between the User and the Research Infrastructure that will lead to an agreed fee for the Access.

2) For the Access granted under market-based Access mode, Research Infrastructures are exempt from publishing negotiating terms and conditions with particular reference to the Access fees.

iv. Ubiquitous Access

1) This Access mode guarantees the widest possible access to scientific data and/or digital services provided by the Research Infrastructure to Users wherever they are based, within the acceptable use policy.

2) The ubiquitous Access mode aims at Users in need of scientific data and/or advanced integrated digital services to carry out world class (cross-disciplinary) research.

3) Research Infrastructures adopting an ubiquitous Access mode should maximise availability and visibility of the data and/or services provided.

b. Education and training

Research Infrastructures are encouraged to offer education and training in the areas of their research activities and to collaborate with other organisations such as higher education institutions that would benefit from using the Research Infrastructure for their education and training purposes.

c. Legal framework

i. Access to any given Research Infrastructure should be regulated by a legal framework that could range from generic terms and conditions for use accepted by the User, to a dedicated contract up to the provisions of international agreements or treaties.

ii. The legal framework should cover, at the least, Access, intellectual property rights, data protection, confidentiality, liability and eventual fees.

d. Transparency

i. Research Infrastructures should have a single point providing clear and transparent information on the Research Infrastructures, on the procedures for application, evaluation, selection, priority setting and admission, on the equipment available, on data management and on the services provided or the conditions for use.

ii. When applicable, information should be provided on, costs, fees, value according to defined Access units, contractual obligations, immigration rules and procedures, health safety and environment rules and procedures, intellectual property rights and on the legal settlement of disputes.

e. Health, safety and environment

i. Research Infrastructures should undertake the necessary measures to ensure the health and safety of any User accessing the Research Infrastructure as well as to provide for the protection of the environment.

ii. When applicable, Users must comply with security, safety and environmental rules and procedures in force at the Research Infrastructures, in particular concerning the notifications of introduction of material and instrumentation that could induce risks or ethical issues to the facility.

f. Research data management and digital services

Research Infrastructures and Users should ensure that research data is managed stored and preserved in a cost-efficient way and, if appropriate, so that others can use it, with quality and security assurances[3].

g. Limitations

Various regulations may limit the Access to Research Infrastructures such as:

i. governmental limitations, including national security and defence;

ii. privacy and confidentiality;

iii. commercially sensitive and intellectual property rights;

iv. ethical reasons in accordance with applicable laws and regulations.

6. ASSESSMENT

The European Commission, the European Strategy Forum on Research Infrastructures, the e-Infrastructure Reflection Group and the European Research Area stakeholder organisations will regularly assess the relevance and applicability of this Charter, if possible drawing upon the existing monitoring of Research Infrastructures and, whenever appropriate, propose needed amendments.

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[3] See also OECD principles and guidelines for access to research data from public funding (2008)